SPOT FINDING ALGORITHM USING IMAGE RECOGNITION SOFTWARE

Abstract of the Disclosure

A plurality of samples are tested for their ability to enhance or inhibit a biological process in a multiplexed diffusive assay. The assay is imaged after the biological process has produced spots in a medium that indicate the tested enhancing or inhibiting ability of the samples. The image containing the resulting spots are evaluated to determine which samples caused the spots to form. The location of spots are identified by user selection or through a gradient triangulation technique that determines spot locations by analyzing the slope of pixel intensities in numerous subimages. The spots may also be analyzed by parametrically modeling the spots and comparing the spot characteristics in the image to a spot function, to determine the location of hit spots in the image. The hit spot locations, corresponding to the location of tested samples in the assay that enhanced or inhibited the biological process, are output to facilitate further analysis of the test samples.

PATENT APPLICATION

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